#4095
OK

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

May 21, 2012

TO: Internal File

THRU: Daron Haddock, Coal Program Manager

FROM: Steve Christensen, Environmental Scientist SC

RE: Midterm Review Completion Response, Wildcat Loadout, Intermountain Power Agency, C/007/0033, Task ID #4095

SUMMARY:

On September 29th, 2011, the Division of Oil, Gas and Mining (the Division) informed Intermountain Power Agency (the Permittee) of the commencement of a midterm review of the Wildcat Loadout permit. The Division is required to review each active permit during its term, in accordance with R645-303-211. This review is to take place at the midpoint of the permit term.

The Midterm Review for the Wildcat Loadout includes the following items:

A. Review of the Plan to ensure that the requirements of all permit condition, division orders, notice of violation (NOV), abatement plans, and permittee-initiated Plan changes approved subsequent to permit approval or renewal (whichever is the most recent) are appropriately incorporated into the Plan document.

B. Ensure that the Plan has been updated to reflect changes m the Utah Coal Regulatory Program which have occurred subsequent to permit approval or renewal.

C. Review applicable portions of the permit to ensure that the Plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

D. Evaluate the compliance status of the permit to ensure that all unabated enforcement actions comport with current regulations for abatement; verify the status of all finalized penalties levied subsequent to permit issuance or permit renewal, and verify that there are no demonstrated patterns of violation (POV). This will include an AVS check to ensure that Ownership and Control information is current and correct.

E. Evaluate the reclamation bond to ensure that coverage adequately addresses permit changes approved subsequent to permit approval or renewal, and to ensure that the bond amount is appropriately escalated in current-year dollars.

F. Evaluate the permit for compliance with variances or special permit conditions.

G. Optional for active mines, mandatory for reclamation only sites: conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness for operational, reclamation, and contemporaneous reclamation practices undertaken on predetermined portions of the disturbed area to minimize, to the extent practicable, the contribution of acid or toxic materials to surface or groundwater, and to otherwise prevent water pollution.

The previous technical analysis (#3931) included a review of the Administrative Rules as well as the BTCA relative to preventing additional contributions of suspended solids to stream flows outside the permit area. As part of that analysis, the following deficiencies were identified:

R645-301-, 112 and -121.100- The Permittee must revise the approved Mining and Reclamation Plan (MRP) to accurately reflect that Andalex Resources, Inc. is no longer associated with the Wildcat Loadout Facility. Chapter 1 revisions were received by the Permittee on October 24th, 2011 and will be reviewed by the Division under Task ID #3942; however, references to Andalex Resources, Inc. are found throughout the MRP and must be removed and/or addressed by the Permittee to accurately reflect the current ownership information.

R645-301-742: The Permittee must address the outstanding sediment control measures as outlined on page 2 of Appendix P and page 1 of Appendix R. The MRP outlines the elimination of Sediment Pond B and the construction of Sediment Pond G. Additionally, Appendix R discusses the construction of an additional ASCA (ASCA-8).

R645-301-742: The Permittee must revise the sediment control measures section of the MRP (Appendix R) to reflect current conditions. Upon review, it appears that all design information for Sediment Pond B has been removed from the approved MRP. Additionally Plate 3B has been removed from the MRP. It's the Division's understanding that Pond B was not removed and is currently in use at the site.

R645-301-731 and -742: The Permittee must revise Plate 2A, *Wildcat Loadout Proposed Drainage Map Response* to DO-04. The plate must be revised to reflect the current drainage components utilized at the site. Plate 2A depicts Sediment Pond G and has deleted Sediment Pond B. The drainage map must accurately reflect the current drainage configuration.

Based on the re-submitted information (received 05/09/2012), the amendment to the Wildcat MRP should/should not be approved at this time. The following deficiencies must be addressed prior to issuance of final approval:

R645-301-742: The Permittee must revise Appendix R to reflect the sediment control measures to be implemented as agreed upon at the December 13th, 2012 meeting with the Division of Oil, Gas and Mining. The previous technical analysis directed the Permittee to revise page 2 of Appendix P *and* page 1 of Appendix R to address outstanding sediment control measures. Upon review of the amendment, it appears that Appendix R was not revised.

R645-301-512.100 , -512.200 and -731.720: The Permittee must provide a professional engineered stamp on Plate 2A, *Wildcat Loadout Proposed Drainage Map Response to DO-04* and Plate 3B, *Wildcat Loadout Sediment Pond "B"*. The Division acknowledges that the Addendum to Appendix R, *Sediment Pond B* was stamped on the cover page by J. Thomas Paluso; however, R645-301-512.100 and -512.200 require that the impoundment cross-sections and maps must be stamped by a professional engineer. R645-301-731.720 requires professional engineer certification for a map that depictes the locations of each water diversion, collection, conveyance, treatment, storage and discharge facility to be used at the site (i.e. Map 2A).

R645-301-121.200, -742: The Permittee must revise Plate 2A, *Wildcat Loadout Proposed Drainage Map Response to DO-04*. The submitted Plate 2A is exceedingly difficult to read/interpret due to it's size and the use of one color. The currently approved Plate 2A is of sufficient size and utilizes different colors to differentiate between the various components of the drainage system at the site. Please re-submit Plate 2A in a similar format/sizing.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

The MRP meets the Permit Application and Format and Contents requirements of the State of Utah R645-Coal Mining Rules.

The previous technical analysis (Task ID #3931) had directed the Permittee to revise the Chapter 7 Table of Contents to accurately identify the page numbers of the respective sections. The table of contents has been revised accordingly.

Findings:

The amendment meets the Permit Application and Format and Contents requirements of the State of Utah R645-Coal Mining Rules.

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

The previous technical analysis (Task ID #3931) had directed the Permittee to revise the approved Mining and Reclamation Plan (MRP) to accurately reflect that Andalex Resources, Inc. is no longer associated with the Wildcat Loadout Facility. References to Andalex Resources, Inc. were found throughout the MRP and must be removed and/or addressed by the Permittee to reflect the current ownership/information.

In response to the deficiency, the Permittee has provided a disclaimer on the cover page for each chapter in the MRP. The disclaimer indicates states, *"*Please note - on May 11, 2011, Intermountain Power Agency ("IPA") acquired the Wildcat Loadout from Andalex Resources, Inc. ("Andalex"). References to Andalex will therefore occur herein. However, permit actions*

from May 11, 2011 forward will be the responsibility of IPA, regardless whether Andalex is referenced as the responsible party for such actions." The Division finds that the disclaimer addresses the deficiency.

Findings:

The Identification of Interests Information meets the requirements of the State of Utah R645-Coal Mining Rules.

OPERATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Sediment Control Measures

The MRP does not meet the Sediment Control Measure requirements of the State of Utah R645-Coal Mining Rules. The Permittee has demonstrated the use of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

The primary form of sediment control at the Wildcat Loadout site is the utilization of sedimentation ponds. Six sediment ponds (A, B, C, D, E, and F) are utilized to safely contain and treat the storm water runoff generated at the site. The design calculations and sizing considerations are provided in Appendix R, *Sedimentation and Drainage Control Plan.* The locations of the ponds are provided on Plate 2A, *Wildcat Loadout Proposed Drainage Map Response* to DO-04. Per the requirements of the Permittee's Utah Pollution Discharge Elimination System permit, the Permittee samples the effluent from the sediment ponds and provides the data quarterly to the Division's electronic water quality database.

The other form of sediment control utilized at the site is the use of Alternative Sediment Control Areas (ASCA). The Permittee utilizes 7 ASCA areas to control sediment transport in areas where the storm water runoff is not readily routed to a sediment pond. The ASCA's that are utilized are primarily straw bales, berms and vegetation. The ASCA areas are shown on Plate 2. Chapter 5 provides a description of each one.

Straw bales, berms, and vegetation are used alone or in combination for sediment control on seven small ASCAs. The ASCAs treat a total of 17.51 acres or 26 percent of the total

disturbed area. These ASCAs are shown on Plate 2, and Chapter 5 contains complete descriptions of each area.

The previous technical analysis (Task ID #3931) identified several deficiencies relative to sediment control measures at the Wildcat Loadout facility. The deficiencies were primarily generated as a result of outstanding action items relative to Division Order DO-04.

The Permittee was directed to address the outstanding sediment control measures outlined on page 2 of Appendix P and page 1 of Appendix R. The MRP had discussed the elimination of Sediment Pond B and the construction of Sediment Pond G. Additionally, Appendix R discusses the construction of an additional ASCA (ASCA-8) upon the construction of Pond "G".

Based upon a review of the amendment, it does not appear that Appendix R, Sedimentation and Drainage Control Plan has been revised to reflect the outcome of the meeting between the Permittee and the Division on December 13th, 2012.

The Permittee must revise Appendix R to reflect the sediment control measures to be implemented as agreed upon at the December 13th, 2012 meeting with the Division of Oil, Gas and Mining. The previous technical analysis directed the Permittee to revise page 2 of Appendix P *and* page 1 of Appendix R to address outstanding sediment control measures. Upon review of the amendment, it appears that Appendix R was not revised.

The previous technical analysis (Task ID #3931) also identified a deficiency that directed the Permittee to revise the sediment control measures section of Appendix R to reflect current conditions at the site. The previous review determined that the design information for Sediment Pond B had been removed from the approved MRP. Additionally, Plate 3B had been removed from the MRP. As Pond B was not removed (and is currently in use), the Permittee was directed to revise the MRP accordingly.

The Permittee has provided the design information as an addendum to Appendix R, "Sediment Pond B". The information provides the design parameters/considerations in the design of Sediment Pond B. The pond has been adequately sized to contain the runoff from a 10-year, 24-hour event as required by the State of Utah R645-Coal Mining Rules.

The peak runoff was calculated using SEDCAD 4 for Windows by Civil Software Design. SEDCAD 4 utilizes the NRCS Method for Type II storms. Upon review of the Permittee's assumptions, the Permittee finds that the runoff curve number, sediment yield capacity, direct precipitation to the pond, sediment pond volume and spillway description are conservative and accurate.

Howevever, Plate 3B, *Wildcat Loadout Sediment Pond "B"*, was not stamped by a registered professional engineer as required by R645-301-512.100 and -512.200. The Permittee must provide a professional engineered stamp on Plate 3B, *Wildcat Loadout Sediment Pond "B"*. The Division acknowledges that the Addendum to Appendix R, Sediment Pond B was stamped on the cover page by J. Thomas Paluso; however, R645-301-512.100 and -512.200 require that

the cross-section and design drawings for Sediment Pond B must also be stamped by a professional engineer.

The Permittee was further directed during the previous technical analysis (Task ID #3931) to revise Plate 2A, *Wildcat Loadout Proposed Drainage Map Response to DO-04.* The plate was to be revised to reflect the current drainage components utilized at the site. Plate 2A had depicted Sediment Pond G as an active pond and deleted Sediment Pond B (still active at the site). Plate 2A has been revised to depict Sediment Pond B. However; the scale and color of the map render it exceedingly difficult to read/interpret. The Permittee must revise Plate 2A, *Wildcat Loadout Proposed Drainage Map Response to DO-04.* The submitted Plate 2A is exceedingly difficult to read/interpret due to it's size and the use of one color. The currently approved Plate 2A is of sufficient size and utilizes different colors to differentiate between the various components of the drainage system at the site. Please re-submit Plate 2A in a similar format/sizing in order to facilitate a more accurate assessment of the drainage configuration at the site.

Findings:

Deficiencies have been identified relative to the Hydrologic Information requirements of the State of Utah R645-Coal Mining Rules. The following deficiencies must be addressed:

R645-301-742: The Permittee must revise Appendix R to reflect the sediment control measures to be implemented as agreed upon at the December 13th, 2012 meeting with the Division of Oil, Gas and Mining. The previous technical analysis directed the Permittee to revise page 2 of Appendix P *and* page 1 of Appendix R to address outstanding sediment control measures. Upon review of the amendment, it appears that Appendix R was not revised.

R645-301-512.100 , -512.200 and -731.720: The Permittee must provide a professional engineered stamp on Plate 2A, *Wildcat Loadout Proposed Drainage Map Response to DO-04* and Plate 3B, *Wildcat Loadout Sediment Pond "B".* The Division acknowledges that the Addendum to Appendix R, *Sediment Pond B* was stamped on the cover page by J. Thomas Paluso; however, R645-301-512.100 and -512.200 require that the impoundment cross-sections and maps must be stamped by a professional engineer. R645-301-731.720 requires professional engineer certification for a map that depictes the locations of each water diversion, collection, conveyance, treatment, storage and discharge facility to be used at the site (i.e. Map 2A).

R645-301-121.200, -742: The Permittee must revise Plate 2A, *Wildcat Loadout Proposed Drainage Map Response to DO-04.* The submitted Plate 2A is exceedingly difficult to read/interpret due to it's size and the use of one color. The currently approved Plate 2A is of sufficient size and utilizes different colors to differentiate between the various components of the drainage system at the site. Please re-submit Plate 2A in a similar format/sizing..

RECOMMENDATIONS:

The Division should not approve the mid-term response at this time. The aforementioned deficiencies must be addressed prior to issuance of final approval.